

#### **ABSTRACT OF THE DISCLOSURE**

[0034] A radiation-emitting semiconductor component having a layer structure which contains an n-doped cladding layer (18), a p-doped cladding layer (20), and an active layer (14) based on InGaAlP arranged between the n-doped cladding layer (18) and the p-doped cladding layer (20). A diffusion stop layer (16) is arranged between the active layer (14) and the p-doped cladding layer (20). The diffusion stop layer (16) is formed by a strained superlattice.